

ROZENBERG, A. Ya.

met Modern Methods of Producing Castings with a Hard Surface and Bolt Core. A. Ya. Rozenberg. (Moscow, 1953, (2), 4-7). (In Russian). After a brief consideration of the application of iron castings with hard surfaces, three methods for securing a core of satisfactory mechanical properties in conjunction with hard and wear-resisting surfaces, exemplified by rolls, are described. In the first, the same iron is used for surface and core, chills being used to secure hardness of surface. In the second and third methods the iron for the surface is left in the mould only long enough to solidify to the required depth. The liquid core iron is then replaced either by a separately-melted iron of the grade required for the core or by iron of the same melt to which powdered ferrosilicon is added as it flows into the mould.

of

ROZENBERG, A. YA.

Founding

Present-day methods of obtaining castings with hard surface and soft core. Lit. proizv.
No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
CA										9									
										Rolls for hot-rolling of tin plate. A. S. Beshlyk and A. Ya. Rosenberg. <i>Tsviya Prakt. Met.</i> 11, No. 8, 39-42 (1959). The rolls for rolling tin plate must have the following characteristics: a depth of the chilled layer of 10-20 mm. (better 15 mm.), a 54-62 hardness of the chilled layer and a 20-5-mm. transition zone. The chem. compn. of such rolls is C 2.8-3.1, Si 0.5-0.55, Mn 0.3-0.4, P 0.4-0.6, S 0.05-0.08 and Mo 0.3-0.4%. The increase of the strength of the rolls from the addn. of Mo amply covers the addnl. cost. The rolls must be stored for not less than 3 months before their use. Attempts to increase the hardness of the chilling by the addn. of small amts. of Cr produced neg. results. Such an addn. of Cr decreases sharply their strength and decreases the quality of the chilled layer. It is possible to increase the life of the tin-plate rolls to 1100 hrs. and more. The Mo rolls can be used not only for rolling tin plate, but also for rolling the medium and heavy sheets. All possible contamination with Cr of the rolls must be avoided. W. R. Henn									
ASB-SLA. METALLURGICAL LITERATURE CLASSIFICATION																			
15GHI STIRIIVN										15GHI STIRIIVN									
15GHI STIRIIVN										15GHI STIRIIVN									

5(4)

SOV/76-33-9-2/37

AUTHORS:

Stepanov, B. I., Zhbakov, R. G., Rozenberg, A. Ya.

TITLE:

Infrared Spectra of Cellulose in the Viscose-production Process

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 9, pp 1907-1915 (USSR)

ABSTRACT:

The infrared spectra (IS) of the sulfite-, alkaline- and hydrate-cellulose were investigated within the wave-range 2.5-13 μ during various stages of the technological process of viscose-production. By applying a special methodology (Ref 3), the investigations (as distinct from others of this type (Ref 2)), could be carried out without an immersion medium. A spectrometer of the type IKS-11, an amplifier of the type FEOU-12 and an optical indicator of the type IZV-1 were used. It was observed that after a treatment of the cellulose (C) with concentrated lye, a considerable reduction in the intensity of the spectral bands of the deformation-oscillations in the CH₂-group takes place, i.e. the mercerized (C) is of different structure than the initial product. The latter is also confirmed by a strong increase of the absorption in the wave-range 910 cm⁻¹. It was established, however, that this cannot

Card 1/2

SOV/76-33-9-2/37

Infrared Spectra of Cellulose in the Viscose-production Process

be traced to an accumulation of aldehyde groups through oxidation with atmospheric oxygen, or a hydrolysis during the washing out of the lye. A reduction of the intensity of the spectral band of the hydroxyls (3333 cm^{-1}), which was observed in the (S) of dried alkaline-(C) samples, permits the assumption that under the given circumstances, a formation of the cellulose alcoholate is not impossible. Practically all primary hydroxyl groups of the (C) react with the lye already during the mercerizing, so that the penetration of the lye into the basic mass of the (C) can be assumed. The papers by V. N. Nikitin (Ref 1) are mentioned in the text. There are 5 figures and 11 references, 9 of which are Soviet.

ASSOCIATION: Belorusskiy gosudarstvennyy universitet, Minsk (Belorussian State University, Minsk). Zavod iskusstvennogo volokna, Mogilev (Factory for Synthetic Fibres, Mogilev)

SUBMITTED: July 10, 1957

Card 2/2

ROZENBERG, A.Z.

ANIKEYEV, I.Ya., inzhener.; ROZENBERG, A.Z., inzhener.

Unit for hydraulic transportation of excavated soil. Mekh.stroi.
14 no.3:17-19 Mr '57. (MLRA 10:4)
(Hydraulic machinery)

ROZENBERG, A.Z.

DECEASED

D. 1957

SEE ILC

NEUROLOGY

ROZENBERG, B.A.; DZHIGIREY, N.V.; DOROFYENKO, G.N.; BABIN, Ye.P.

Perchloric acid and its compounds as catalysts in organic synthesis. Part 8: Catalytic acylation of some aryl olefins. Zhur.ob.khim. 32 no.10:3417-3421 0 '62. (MIRA 15:11)

1. Donetskoye otdeleniye Instituta organicheskoy khimii
AN Ukrainskoy SSR.

(Olefins)

(Acylation)

(Perchloric acid)

BABIN, Ye.P.; ROZENBERG, B.A.; FISHELEVICH, Z.A.

Boron fluoride as catalyst in the polymerization reaction of unsaturated hydrocarbons of a heavy benzene fraction. Koks i khim. no.2:40-42 '62. (MIRA 15:3)

1. Donetskoye otdeleniye Instituta organicheskoy khimii AN USSR.
(Coumaron---Indene resins) (Hydrocarbons)

ROZENBERG, B.A.; LYUDVIG, Ye.B.; DESYATOVA, N.V.; GNATMAKHER, A.R.; MEDVEDEV, S.S.

Copolymerization of tetrahydrofuran with α -oxides. Vysokom. soed. 7 no.6:
101C-1015 Je '65. (MIRA 18:9)

1. Fiziko-khimicheskiy institut imeni L.Ya.Karpova, Moskva.

ROZENBERG, B.A.; SHANOVSKAYA, S.S.; KOCHAN, L.D.; FISHILEVICH, Z.A.;
BABIN, Ye.P.

Increasing the stability of foams used for dust suppression in
coal mines. Zhur. prikl. khim. 37 no. 4:908-911 Ap '64.
(MIRA 17:5)

DOROFYENKO, G. N.; BABIN, Ye. P.; ROZENBERG, B. A.; OSIPOV, O. A.;
KASHIRENINOV, O. Ye.

Catalytic acetylation of some polymers. Izv. vys. ucheb. zav.;
khim. i khim. tekhn. 5 no.5:804-807 '62. (MIRA 16:1)

1. Donetskoye otdeleniye Instituta organicheskoy khimii AN
UkrSSR i Rostovskiy-na-Donu gosudarstvennyy universitet.

(Polymers) (Acetylation)

ROZENBERG, B.A.; BODNARCHUK, R.D.; DOROFYENKO, G.N.; BABIN, Ye.P.

Perchloric acid and its compounds as catalysts in organic synthesis. Part 10: Acylation in the acenaphthene series. Zhur. ob. khim. 33 no.5:1489-1492 My '63. (MIRA 16:6)

1. Donetskoye otdeleniye Instituta organicheskoy khimii AN UkrSSR.

(Acenaphthene) (Acylation)
(Perchloric acid)

SHEYNKMAN, A. K.; ROZENBERG, B. A.; ARTAMONOV, A. A.

Vinylpyridines and the polymers derived from them. Khim.
prom. no.3:181-187 Mr '63. (MIRA 16:4)

1. Donetskoye otdeleniye Instituta organicheskoy khimii
Akademii nauk UkrSSR.

(Pyridine) (Polymers)

MAKLETSOVA, N.V.; EPEL'BAUM, I.V.; ROZENBERG, B.A.; LYUDVIG, Ye.B.

Determination of molecular weight and molecular weight distribution
of polytetramethylene oxide. Vysokom.soed. 7 no.1:70-73 Ja '65.
(MIRA 18:5)

1. Fiziko-khimicheskiy institut imeni Karpova, Moskva.

ROZENBERG, B.A.; LYODVIG, Ye.b.; GANTMAKHER, A.R.; MEDVEDEV, S.S.

Effect of reaction chain transfer to polymer in the cationic
polymerization of oxygen-containing cyclic compounds. Vysokom.
soed. 7 no.1:188-189 Ja '65. (MIRA 18:5)

LYUBVIG, Ye.B.; ROZENTBERG, B.A.; ZVEREVA, T.R.; GANTSMAN, O.R.;
MELVEDEV, S.S.

Polymerization of tetrahydrofuran in the presence of antimony
pentachloride and its compounds. Vysokom. soed. 7 no.2:269-274
P. 165. (MIRA 18:3)

1. Fiziko-khimicheskiy institut imeni Karpova, Moskva i Donetskii
filial Instituta khimicheskikh reaktivov i osobo chistykh veshchestv.

ARTAMONOV, A.A.; ROZENBERG, B.A.; SHEYNKMAN, A.K.

Pyridylethylation reaction. Reakts. i metod. issl. org. soed.
14:173-298 '64. (MIRA 18:3)

ROZENBERG, B.A.; BABIN, Ye.P.

Telomerization of tetrahydrofuran. Zhur. org. khim. 1 no.6:1102-1104
Je '65. (MIRA 18:7)

ROZENBERG, B.A.; LYUDVIG, Ye.B.; GANTMAKHER, A.R.; MEDVEDEV, S.S.

Mechanism of tetrahydrofuran polymerization induced by trialkyl
oxonium salts. Vysokom. soed. 6 no.11:2035-2039 N '64
(MIRA 18:2)

1. Donetskoye otdeleniye instituta organicheskoy khimii AN
UkrSSR i Fiziko-khimicheskiy institut imeni Karpova, Moskva.

ROZENBERG, B.F., kand.tekhn.nauk; SHAPERIN, I.L., kand.tekhn.nauk

Small-sized automatic electric packaging machine. Mekh. i avtom.
proizv. 19 no.2:30-33 F '65. (MIRA 18:3)

ANTONOV, V.Ya., kand.tekhn.nauk; BEZZUBOV, N.D., kand.tekhn.nauk; BELOKO-
 PYTOV, I.Ye., kand.sel'skokhoz.nauk; BLYUMENBERG, V.V., kand.tekhn.
 nauk; BOGDANOV, N.N., kand.tekhn.nauk; BRAGIN, N.A., inzh.; VASIL'YEV,
 Yu.K., inzh.; VINOGRADOV, V.A., inzh.; ROZENBERG, B.I., inzh.; GOR-
 GIDZHANYAN, S.A., kand.tekhn.nauk; ZIZA, A.A., kand.sel'skokhoz.nauk;
 KALABUKHOV, M.V., agronom-meliorator; KOLOTUSHKIN, V.I., inzh.; KORCHU-
 NOV, S.S., kand.tekhn.nauk; KRYUKOV, M.N., dotsent; VAVULO, V.A., inzh.;
 NAUMOV, D.K., kand.tekhn.nauk; OLENIN, A.S., inzh.; PROVORKIN, A.S.,
 inzh.; PROKHOROV, N.I., dotsent; RASKIN, G.I., inzh.; SAVENKO, I.V.,
 inzh.; SERGEYEV, B.F., kand.tekhn.nauk; STOYLIK, M.A., inzh.; SUKHA-
 NOV, M.A., inzh.; TOPOI'NITSKIY, N.M., kand.tekhn.nauk; TYURINOV, S.N.,
 doktor biol.nauk, prof.; FATCHIKHINA, O.Ye., kand.sel'skokhoz.nauk;
 TSVETKOV, B.I., inzh.; CHUBAROV, N.D., inzh.; MANDEL'BAUM, A.I., inzh.;

(Continued on next card)

ANTONOV, V.Ya.---(continued) Card 2.

YARTSEV, A.K.; SAMSONOV, N.N., inzh., glavnyy red.; BERSHADSKIY, L.S., inzh., nauchnyy red.; VARENTSOV, V.S., kand.tekhn.nauk, nauchnyy red.; VYSOTSKIY, K.P., kand.tekhn.nauk, nauchnyy red.; GORINSHTEYN, L.L., kand.tekhn.nauk, nauchnyy red.; GORYACHKIN, V.G., prof., nauchnyy red.; YEFIMOV, P.N., kand.tekhn.nauk, nauchnyy red.; KUZEMAN, G.I., kand.tekhn.nauk, nauchnyy red.; KULAKOV, N.N., kand.tekhn.nauk, nauchnyy red.; KUTAIS, L.I., prof., doktor tekhn.nauk, nauchnyy red.; MIRKIN, M.A., inzh., nauchnyy red.; SEMENSKIY, Ye.P., kand.tekhn.nauk, nauchnyy red.; SOKOLOV, A.A., kand.tekhn.nauk, nauchnyy red.; KHAZANOV, Ya.N., dotsent, nauchnyy red.; KHALUGO, A.K., inzh., nauchnyy red.; TSUPROV, S.A., dotsent, nauchnyy red.; SHTEYNBOK, G.D., inzh., nauchnyy red.; KOLOTUSHKIN, V.I., red.; SKVORTSOV, I.M., tekhn.red.

[Reference book on peat] Spravochnik po torfu, Moskva, Gos.energ. izd-vo, 1954, 728 p. (MIRA 13:7)

1. Chlen-korrespondent AN BSSR (for Goryachkin),
(Peat--Handbooks, manuals, etc.)

AL'SHITS, Yakov Isaakovich, dots.; VERKLOV, Boris Abramovich; VOROVITSKIY, Abram Nakhimovich, dots.; KOSTYUKEVICH, Fedor Vasil'yevich, dots.; MALEYEV, Georgiy Vasil'yevich, dots.; OSOKIN, Pavel Andreyevich, assist.; ROZENBERG, Boris Lazarevich, dots.; LADYGIN, A.M., inzh. retsenzent; SHURIS, N.A., red.; SHOROKHOVA, A.V., red. izd-va; BOLDYREVA, Z.A., tekhn. red.; MAKSIMOVA, V.V., tekhn. red.

[Mining machinery] Gornye mashiny. By IA.I.Al'shits i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1961. 491 p.
(MIRA 14:12)

1. Glavnyy inzhener Spetsial'nogo konstruktorskogo byuro Kopeyskogo mashinostroitel'nogo zavoda (for Verklov).
(Mining machinery)

YATSKIKH, Valerian Grigor'yevich, kand. tekhn. nauk; ROZENBERG,
Boris Lavrent'evich, kand. tekhn. nauk; IMAS, Aleksandr
Davydovich, inzh.; SPEKTOR, Leonid Abramovich, inzh.;
KHORIN, D.N., doktor tekhn. nauk, retsenzent; LOKHANIN,
K.I., inzh., retsenzent; FEYGIN, L.M., inzh., retsenzent;
ABRAMOV, V.I., inzh., red.izd-va; MINSKER, L.I., tekhn.
red.

[Mining machines] Gornye mashiny. [By] V.G.Iatskikh i dr.
Moskva, Gosgortekhzdat, 1963. 382 p. (MIRA 16:10)
(Coal mining machinery)

YATSKIKH, Valerian Grigor'yevich, kand.tekhn.nauk; ROZENBERG, Boris Leza-
ravich, kand.tekhn.nauk; IMAS, Aleksandr Davidovich, inzh.;
MAKSIMOV, Vladimir Leonidovich, inzh.; Prinimal uchastiye;
SPEKTOR, L.A., inzhener-konstruktor. LADYGIN, A.M., otv.red.;
SHOROKHOVA, A.V., red.izd-va; IL'INSKAYA, G.M., tekhn.red.

[Mining machinery] Gornye mashiny. Moskva, Gos.nauchno-tekhn.
izd-vo lit-ry po gornomu delu, 1959. 507 p. (MIRA 12:12)

1. Gorlovskiy zavod im. S.M.Kirova (for Spektor).
(Mining machinery)

AGALINA, M.S., inzh.; AKUTIN, T.K., inzh.; APRESOV, A.M., inzh.; ARISTOV, S.S., kand. tekhn. nauk.; BELOSTOTSKIY, O.B., inzh.; BERLIN, A.Ye., inzh.; BESSKIY, K.A., inzh.; BLYUM, A.M., inzh.; BRAUN, I.V., inzh.; BRODSKIY, I.A., inzh.; BURAKAS, A.I., inzh.; VAYNMAN, I.Z., inzh.; VARSHAVSKIY, I.N., inzh.; VASIL'YEVA, A.A., inzh.; VORONIN, S.A., inzh.; VOYTSEKHOVSKIY, L.K., inzh.; VRUBLEVSKIY, A.A., inzh.; GERSHMAN, S.G., inzh.; GOLUBYATNIKOV, G.A., inzh.; GORLIN, M.Yu., inzh.; GRAMMATIKOV, A.N., inzh.; DASHEVSKIY, A.P., inzh.; DIDKOVSKIY, I.L., inzh.; DOBROVOL'SKIY, N.L., inzh.; DROZDOV, P.F., kand. tekhn. nauk.; KOZLOVSKIY, A.A., inzh.; KIRILENKO, V.G., inzh.; KOPELYANSKIY, G.D., kand. tekhn. nauk.; KORETSKIY, M.M., inzh.; KUKHARCHUK, I.N., inzh.; KUCHER, M.G., inzh.; MERZLYAK, M.V., inzh.; MIRONOV, V.V., inzh.; NOVITSKIY, G.V., inzh.; PADUN, N.M., inzh.; PANKRAT'YEV, N.B., inzh.; PARKHOMENKO, V.I., kand. biol. nauk.; PINSKIY, Ye.A., inzh.; PODLUBNYI, S.A., inzh.; PORAZHENKO, F.F., inzh.; PUZANOV, I.G., inzh.; REDIN, I.P., inzh.; REZNIK, I.S., kand. tekhn. nauk.; ROGOVSKIY, L.V., inzh.; RUDERMAN, A.G., inzh.; RYBAL'SKIY, V.I., inzh.; SADOVNIKOV, I.S., inzh.; SEVER'YANOV, N.N., kand. tekhn. nauk.; SEMESKO, A.T., inzh.; SIMKIN, A.Kh., inzh.; SURDUTOVICH, I.N., inzh.; TROFIMOV, V.I., inzh.; FEFER, M.M., inzh.; FIALKOVSKIY, A.M., inzh.; FRISHMAN, M.S., inzh.; CHERESHNEV, V.A., inzh.; SHESTOV, B.S., inzh.; SHIFMAN, M.I., inzh.; SHUMYATSKIY, A.F., inzh.; SHCHERBAKOV, V.I., inzh.; STANCHENKO, I.K., otv. red.; LISHIN, G.L., inzh., red.; KRAVTSOV, Ye.P., inzh., red.; GRIGOR'YEV, G.V., red.; KAMINSKIY, D.N., red.; KRASOVSKIY, I.P., red.; LEYTMAN, L.Z., red. [deceased]; GUREVICH, M.S., inzh., red.; DANILEVSKIY, A.S., inzh., red.; DEMIN, A.M., inzh., red.; KAGANOV, S.I., inzh., red.; KAUFMAN, B.N., kand. tekhn. nauk., red.; LISTOPADOV, N.P., inzh., red.; MENDELEVICH, I.R., inzh., red. [deceased];

(continued on next card)

AGALINA, M.S.... (continued) Card 2.

PENTKOVSKIY, N.I., inzh., red.; ROZENBERG, B.M., inzh., red.; SLAVIN, D.S., inzh., red.; FEDOROV, M.P., inzh., red.; TSYMBAL, A.V., inzh., red.; SMIRNOV, L.V., red. izd-va.; PROZOROVSKAYA, V.L., tekhn. red.

[Mining ; an encyclopedic handbook] Gornoe delo; entsiklopedicheskiy spravochnik. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po ugol'noi' promyshl. Vol. 3. [Organization of planning; Construction of surface buildings and structures] Organizatsiya proektirovaniya; Stroitel'stvo zdaniy i sooruzheniy na poverkhnosti shakht. 1958. 497 p. (MIRA 11:12)

(Mining engineering)

(Building)

KAMINSKIY, E.Z.; ROZENBERG, B.M.; TRAVINA, N.T.

Studying the kinetics of recrystallization in chromium-nickel-cobalt alloys. Issl. po zharopr. splav. 2:181-185 '57. (MIRA 11:2)
(Chromium-nickel-cobalt alloys--Metallography)

ROZENBERG, B.A.; CHEKHUTA, O.M.; LYUDVIG, Ye.B.; GANTMAKHER, A.R.;
MEDVEDEV, S.S.

Kinetics and equilibrium of tetrahydrofuran polymerization induced by trialkyl oxonium salts. Vysokom. soed. 6 no.11:2030-2034 N '64 (MIRA 18:2)

1. Donetskoye otdeleniye instituta organicheskoy khimii AN
UkrSSR i geofiziko-khimicheskij institut imeni Ka. Jva, Moskva.

A L 11525-66 EWT(m)/EWP(j)/T RPL WW/RM
 ACC NR: AP6001876 SOURCE CODE: UR/0190/65/007/012/2172/2173
 AUTHORS: Rozenberg, B. A.; Yefremova, A. I.; Yenikolopyan, N. S. 4/5
 ORG: none 44,55 44,55 B
 TITLE: A new method for preparation of random, block polymers and graft polymers 1
 SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 12, 1965, 2172-2173
 TOPIC TAGS: polymer, polymerization, copolymerization, block copolymer, graft copolymer, copolymer, chain reaction polymerization 44,55
 ABSTRACT: This investigation is an extension of work on heterochain copolymers, previously published by B. A. Rozenberg, Ye. B. Lyudvig, A. R. Gantmakher, and S. S. Medvedev (Vysokomolek. soyed. 7, 188, 1965). It was shown that random, block, and graft polymers may be synthesized using a chain transfer mechanism in which a chain transfer occurs from a heterochain copolymer to the growing polymer. Experiments were carried out on the following pairs of polymers: polydioxolane - polyoxymethylene (random or block copolymer); polytetramethylenoxide - polyoxymethylene (graft copolymer); polyvinylbutyl ester - polyoxymethylene (random or block copolymer); polydioxolane - poly-(3,3-bis-(chloromethyl) oxacyclobutane (random or block copolymer); polyvinylbutyl ester - poly-(3,3-bis-(chloromethyl) oxacyclobutane (graft copolymer). Orig. art. has: 1 table.
 SUB CODE: 0711/ SUBM DATE: 04Jun65/ ORIG REF: 001/ OTH REF: 003
 Card 1/10 UDC: 543.64

L 51187-65 EPF(c)/EWT(m)/EWP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5015126

UR/0366/65/001/006/1102/1104
547.722.3+547.424.2

AUTHOR: Rozenberg, B. A.; Babin, Ye. P.

TITLE: Telomerization of tetrahydrofuran

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 6, 1965, 1102-1104

TOPIC TAGS: telomer, foaming agent, floatation, tetrahydrofuran polymer

ABSTRACT: The telomerization of tetrahydrofuran (TNF) in a HClO_4 - $(\text{CH}_3\text{CO})_2\text{O}$ system was studied primarily to obtain the dimer 4,4'-diacetoxydibutyl ether. The latter is one of the most effective foaming agents and should be most useful in floatation applications. It was found that molar ratios of 0.66-1.00 (acetic anhydride/monomer) optimize the yield of the dimer. Boiling of the reaction mixture was also found to improve the yield of the dimer. 4,4'-Dihydroxydibutyl ether was obtained in 72% yield by saponification of 4,4'-diacetoxydibutyl ether with alcoholic KOH. The diacetoxy derivative may serve as the starting material for the preparation of other 4,4'-difunctional derivatives of dibutyl ether. Orig. art. has: 2 tables.

[VS]

Card 1/2

L 51487-65

ACCESSION NR: AP5015126

ASSOCIATION: none

SUBMITTED: 20May64

NO REF SOV: 005

ENCL: 00

OTHER: 004

SUB CODE: OC, GC

ATD PRESS: 4017

4017

Card 2/2

L 16327-65 EWT(m)/EPF(c)/EWP(j)/T PC-4/Pr-4 RM
 ACCESSION NR: AP4049153 S/0190/64/006/011/2030/2034

AUTHOR: Rozenberg, B. A.; Chekhuta, O. M.; Lyudvig, Ye. B.; Gantmakher, A. R.; Medvedev, S. S.

TITLE: Kinetics and equilibrium of the polymerization of tetrahydrofuran induced by trialkyloxonium salts

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 11, 1964, 2030-2034

TOPIC TAGS: trialkyloxonium, tetrahydrofuran, block polymerization, solution polymerization, tetrafluoroborate, cationic polymerization

ABSTRACT: The kinetics of the polymerization of tetrahydrofuran, both in block and in solution in diethyl ether, under the influence of triethyloxonium tetrafluoroborate was investigated by a dilatometric method. The characteristics of the catalyst and the initial substances are given. The kinetic curves at different initial catalyst concentrations are given, showing that the rate of polymerization is directly proportional to the concentration of catalyst and is described by the equation $d[M]/dt = k_p[C_0]([M] - [M_p])$. The rate constant of the polymerization at 20°C determined from the experimental data is equal to 1.66×10^{-2} liter/mole. sec. A study of the effect of the catalyst concentration on the molecular

Card 1/3

L 16327-65

ACCESSION NR: AP4049153

2

weight of the forming polymer showed that over the concentration range 0.02-0.08 mole/liter the molecular weight is inversely proportional to the catalyst concentration. Tabulated data show that at a constant concentration of catalyst (0.02 mole/liter), the molecular weight increases with increasing amount of polymerized monomer. Over a temperature range of 0-40C, the rate of polymerization, the equilibrium state and the molecular weight were found to be highly dependent on temperature. From the temperature dependence of the rate constant, the energy of activation was $E=13.3$ kcal/mole and the preexponential factor $A=1.64 \times 10^{-8}$ liter/mole. sec. The molecular weight decreased considerably with increasing temperature. The equilibrium concentration of the monomer during polymerization was independent of the initial concentrations of catalyst and monomer and depended only on the temperature. On the basis of this correlation, the change in enthalpy and entropy of polymerization was calculated: $\Delta H = -5.5$ kcal/mole; $\Delta S = -20.8$ cal/mole. deg. The limiting temperature of block polymerization calculated by the equation $T_c = \Delta H / \Delta S^\circ + R \log [M_p]$ is 73C. Orig. art. has: 6 figures, 1 table and 1 formula.

ASSOCIATION: Donetskoye otdeleniye instituta organicheskoy khimii AN USSR (Donets Division of the Institute of Organic Chemistry, AN Ukr. SSR); Fiziko-khimicheskiy institut im. L. Ya. Karpova (Institute of Physical Chemistry)

Card 2/3

L 16327-65
ACCESSION NR: AP4049153

SUBMITTED: 23Jan64

NO REF SOV: 003

ENCL: 00

OTHER: 018

SUB CODE: OC

Card 3/3

L 16326-65 EWT(m)/EPF(c)/EWF(j)/T Po-4/Pr-4 RM
 ACCESSION NR: AP4049154 S/0190/64/006/011/2035/2039

AUTHOR: Rozenberg, B. A.; Lyudvig, Ye. B.; Gantmakher, A. R.; Medvedev, S. S. B

TITLE: Mechanism of the induced polymerization of tetrahydrofuran induced by trialkyloxonium salts

SOURCE: Vyssokomolekulyarnyye soyedineniya, v. 6, no. 11, 1964, 2035-2039

TOPIC TAGS: tetrahydrofuran, boron fluoride etherate, epichlorohydrin polymerization, living polymer, polytetramethylene oxide, trialkyloxonium salt, tetrahydrofuran polymerization, cationic polymerization

ABSTRACT: The mechanism of the cationic polymerization of tetrahydrofuran was investigated and the peculiarities of the polymerization induced by trialkyloxonium salts were discussed on the basis of the given reaction mechanisms. By the analytical method used, it was found that the initiation of the polymerization of tetrahydrofuran in the presence of the system boron fluoride etherate + epichlorohydrin proceeds with the formation of distinct ion pairs and an internal oxonium salt. The peculiarity of the tetrahydrofuran polymerization is that, in contrast to the cationic polymerization of vinyl compounds, the growing ion is oxonium and not carbon. Infrared spectra show the complete absence of

Card 1/3

L 16326-65
ACCESSION NR: AP4049154

lateral methyl groups in the polytetramethylene oxide molecule. On the basis of an analysis of the experimental data, it was established that the polymerization of tetrahydrofuran induced by trialkyloxonium salts proceeds without the rupture of the reaction chains and with the formation of "living polymers." The effect of small additions of water on the polymerization was also studied and water was found to be the chain transfer agent. Its addition does not affect the rate of polymerization, but decreases the molecular weight. The molecular weight also decreases with increasing temperature of polymerization, but the decrease in molecular weight is determined not by the decrease in the ratio between the rate constant of chain growth and the rate constant of chain rupture, as in the cationic polymerization of unsaturated compounds, but by the decrease in the equilibrium concentration of the monomer with increasing temperature. On the basis of the equilibrium monomer concentration, the rate constant of the reversible reaction was calculated as $k_d = 4.67 \times 10^{-2} \text{ sec}^{-1}$ (at 20°C). From the temperature dependence of this constant, the activation energy and the preexponential factor of the depolymerization reaction determined from this relationship are $E=19.4 \text{ kcal/mole}$ and $A=1.65 \times 10^{13}$. It was found that the molecular weights of polytetramethylene oxide are in disagreement with the values expected according to the M/C theory. Orig. art. has: 2 figures, 1 table and 12 formulas.

Card 2/3

L 16326-65

ACCESSION NR: AP4049154

2

ASSOCIATION: Donetskoye otdeleniye instituta organicheskoy khimii AN USSR (Donets
Division of the Institute of Organic Chemistry, AN Ukr. SSR); Fiziko-khimicheskiy institut
im. L. Ya. Karpova (Institute of Physical Chemistry)

SUBMITTED: 23Jan64

ENCL: 00

SUB CODE: OC

NO REF SOV: 002

OTHER: 012

Card

3/3

SVOBODA, A.K.; ROZENBERG, B.S.

Machinery for ventilating industrial buildings. Vod.i san.tekh.
no.6:27-29 S'55. (MLRA 9:1)
(Factories--Heating and ventilation)

ROZINBERG. E. T.

303 Yelektrifikatsiya Torfopredpriyatiy. (Uchebnik Dlya Torf. Tekhnikumov).
M.,-L., Gosenergoizdat, 1954. 360s. 3 Ill.; 16 Skhem. 21 SM 5.000 EKZ
Sr. 40 K. V Per.--Bibliogr: S. 353.--(54-55336) P.
622.331:621.3 t(016.3)

SO: Knizhnaya, Letopis, Vol. 1, 1953

SHUSTER, Ya. [Susters, J.]; CHARNAYA, R.; ROZENBERG, D.; SOLOMONOV, S.;
SHTERNS, Z. [Sterns, Z.]

Pharmacological data on the analeptic, bemegride. Vestis Latv ak no.8:
105-110 '61.

ROZENBERG, D.

Sanitary microbiology.

SO: MIKROBIOLOGIA, Vol. 20, No. 1, Jan/Feb 51.

KACHAN, I.K.; MARCHENKO, D.A.; ROZENBERG, D.A.; ANISIMOV, A.P.;
BERESTETSKIY, M.M.

Experience in planning and building high-voltage electric trans-
mission lines on supports made from centrifugal reinforced concrete.
Energ.biul. no.3:19-25 Mr '54. (MLRA 7:3)

1. Trest Energomontazhneft'.

(Electric lines--Poles)

ROZENBERG, D.A.; IVANOV, V.G.

Practices in constructing precast reinforced concrete water
reservoirs. Prom. stroi. 42 no.5:23-25 '65. (MIRA 18:8)

1. Trest "Ineprospectsstroy".

ALBANY, N.Y.

AID P - 519

Subject : USSR/Engineering

Card 1/1 Pub. 93 - 6/12

Authors: Kachan, I. K., Marchenko, D. A., Rosenberg, D. A.,
Anisimov, A. P., Berestetskiy, M. M., Engineers

Title : Supports for electrical transmission lines made from centrifugal reinforced concrete. (Tested by the Trust Energomontazhneft')

Periodical : Sbor. mat. o nov. tekhn. v stroit., 6, 15-20, 1954

Abstract : The Tbilisi Scientific Research Institute of Construction and Water Power Engineering (TNISGEI) with the assistance of Prof. Mikhaylov, V. V. and Mikhel'son, Ye. E. has designed a new type of support for 6-10-35 kv transmission lines. The supports are assembled from prefabricated tube-shaped members made of reinforced concrete, which is poured into forms by a centrifugal method. 3 photos, 3 tables.

Institution : None

Submitted : No date

ROZENBERG D.A.

KACHAN, I.K., inzhener; MARCHENKO, D.A.; ROZENBERG, D.A.; ANISIMOV, A.P.;
BERESTETSKIY, M.M.

Poles for electric transmission lines made of centrifugally spun
reinforced concrete. Sbor.mat. o nov.tekh. v stroi. 16 no.6:15-20
'54. (MIRA 7:7)

(Electric lines--Poles)

ROZENBERG, D., inzh.; IVANOV, V., inzh.

Results of building a water reservoir from precast reinforced
concrete. Prom. stroi. i inzh. soor. 5 no.5:56-58 S-O '63.
(MIRA 16:12)

KACHAN, I.K.; MARCHENKO, D.A.; ROZENBERG, D.A.; ANISIMOV, A.P.; BERESTETSKIY,
M.M.

Use of poles made from centrifuged reinforced concrete in building electric
transmission and communication lines. Energ.biul. no.6:6-13 Je '53.

(MLPA 6:6)

(Electric lines--Poles)

ROZENBERG, D.O.

PHASE I BOOK EXPLOITATION

SOV/5975

International Institute of Welding

XII kongress Mezhdunarodnogo instituta svarid, 29 iyunya - 5 iyulya 1959 v g.
Opatii (Twelfth Annual Assembly of the International Institute of Welding,
Opatija, June 29 - July 5, 1959) Moscow, Mashgiz, 1961. 359 p. 3000
copies printed.

Sponsoring Agency: Natsional'nyy komitet SSSR po svarke.

Ed. (Title page): G. A. Maslov, Docent; Translated from English, French,
and Serbo-Croatian by N. S. Aborenkova, K. N. Belyayev, E. P. Bogacheva,
L. A. Borisova, K. V. Zvegintseva, V. S. Minavichev, and M. M. Shelechnik;
Managing Ed. for Literature on the Hot-Working of Metals: S. Ya. Golovin,
Engineer.

PURPOSE: This collection of articles is intended for welding specialists and
the technical personnel of various production and repair shops.

Card 1/1.

SOV/5975

Twelfth Annual Assembly (Cont.)

COVERAGE: The collection contains abridged reports presented and discussed at the Twelfth Annual Assembly of the International Institute of Welding. Reports deal with problems of welding and related processes used in repair work, repair techniques, and the problems arising in connection with the nature of the base and filler materials. Examples of repairing various parts are given, and the organization of repair operations in workshops and under field conditions is discussed. Economic aspects of welding and related processes as used in repair work are analyzed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS: [Only Soviet and Soviet-bloc reports are given here]

Foreword

5

PART I. THE STUDY OF REPAIR-WORK TECHNIQUES
(PROCESSES, METHODS, PREPARATION, HEATING, AND
OTHER TYPES OF PROCESSING CONTROL)

Myuntsner, L. (Czechoslovakia). Welding of Broken Crankshafts

36

Card 2/9

SOV/5975

Twelfth Annual Assembly (Cont.)

Tesar, A., and Yu. Lombardini (Czechoslovakia). Isothermal
and Ultracold Welding of Hardenable Steels

42

Paton, B. Ye., G. Z. Voloshkevich, D. A. Didko, Yu. A.
Sternbogen, A. M. Makara, P. I. Sevbo, and D. O.
Rozenberg (USSR). Electroslag Welding in Repairing
Heavy Machines and Mechanisms

49

Frumin, I. I., A. Ye. Asnis, L. M. Gutman,
G. V. Ksendzyk, V. A. Lapchenko, Ye. I. Leynachuk,
Ye. N. Morozovskaya, I. K. Pokhodnya, V. P. Subbotovskiy,
and F. A. Khomus'ko (USSR). Automatic Wear-Resistant
Submerged-Arc Surfacing

60

Snegon, K. (Poland). Restoration of Rolling-Mill Rolls, Crane
Rollers, Forging Dies, and Shears by Arc Welding

72

Card 3/9

ROZENBERG, D. Ya.

FORM

155T29

155T29

USSR/Medicine - Gas Purification Feb 50
Hygiene

"Scientific Conference on Industrial Gas Purification," D. Ya. Rozenberg, 4 pp

"Gig 1 San" No 2

Conference held 18-21 Nov 49 in Leningrad in accordance with Council of Ministers' decree, "Measures of Control of Contamination of the Air and Improvement of Sanitation and Hygienic Conditions in Populated Places," was attended by 222 men from technical, scientific research, and design institutes, and industrial ministries and

PS

155T29

USSR/Medicine - Gas Purification (Contd) Feb 50

large plants. Two basic problems were control of contamination of the air of towns, and analysis of present gas purifiers and recommendations for the improvement. Discusses in some detail works presented by those attending.

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
F 5306. RECENTLY DESIGNED ELECTROSTATIC DUST PRECIPITATOR. Rozen- berg, D. E. (Gig. 1 Sanit. (Hyg. and Sanit., U.S.S.R.), 1948, vol. 13, (4), 48; abstr. in Food Sci. Abstr., 1950, vol. 22, 64). It is claimed that in the designing of this precipitator at the Central Research Laboratory, "Niogaz", of the All-Union Trust of "Gazo-ochistka", the initial data were obtained from foreign scientific publications, and are "purely descriptive", having served only to suggest ideas to the Russian designers. The feature of the new design, distinguishing it from the usual type of air filter, is that the changing and the precipitation of dust particles are separate and distinct processes, the one taking place in an ionization chamber, the other in a precipitation chamber. This feature the new design has in common with the Precipitron, designed in the United States, and briefly described in the present article. Among the uses to which the new precipitator may be put is the removal of dust from the air in food factories. The precipitator, compared with ordinary air filters, is economical of electricity, small, and noiseless, and evolves no harmful gases and fumes.																			
A.S.H. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION										SIGNI BOWING									
SIGNI BOWING										SIGNI BOWING									

ROZENBERG, D.Ye.

Third session of the Vitaminological Research Institute of the
Ministry of Public Health of the U.S.S.R. Sov.med. 25 no.2:145-148
Ag '60. (MIRA 13:9)

(VITAMINS)

ROZENBERG, D.Ye.

Research on water supply and sewerage at the Academy of Municipal Services. Vod.i san.tekh. no.8:39-40 Ag '59.

(MIRA 12:11)

(Water-supply engineering) (Sewerage)

ROZENBERG, D. Ye.

Scientific and technical conference on problems of accounting,
designing, and efficient building methods for underground
structures. Vod. 1 san.tekh. no.6:35-36 S'55. (MLRA 9:1)
(Moscow--Underground construction--Congresses)

ROZENBERG, D. Ye.

Conference of sanitation workers. Vod. i san. tekhn. no. 6:37 S'55.
(MLRA 9:1)

(Moscow--Sanitary engineering--Congresses)

ROZENBERG, D.Ye.

Scientific and technical conference on sanitary improvements in
Moscow. Vod. i san. tekhn. no.5:35-38 Ag '55. (MLRA 9:2)
(Moscow--Sanitary engineering--Congresses)

ROZENBERG, D. Ye.

Conference on agricultural water supply. Vod. i san tekhn. i no.2:
33-34 My'55. (MIRA 8:11)
(Water supply engineering)

ROZENBERG, D. Ye.

Problems of purifying waste water from producer gas plants. Vod.
i san. tekhn. no. 3:37-38 Je '55. (MLRA 8:12)
(Factory and trade waste) (Moscow--Gas producers--Congress~~es~~)

ROZENBERG, D.Ye.

All-Union conference on problems of water and air sanitation and
bacteriology. Vod.1 san.tekh. no.4:36-38 J1'55. (MIRA 8:12)
(Water--Purification--Congresses) (Air--Purification--Congresses)

ROZENBERG, D. YE.

USSR/Chemistry - Purification of Air Jul 51

"Appliances for Capturing Gases and Dust," D. Ye. Rozenberg

"Nauka i Zhizn," Vol XVIII, No 7, pp 38-40

New USSR enterprises must be equipped with air purification devices. Considerable tech advances in this field were made in 1950. Lately 200 air purification devices have been installed at Moscow industrial establishments alone. The Sci Res Inst of Industrial and Sanitary Gas Purification (NIOGAZ) designed and introduced many elec pptn devices, including Rion-28. Rion-28, which

199T12

USSR/Chemistry - Purification of Air Jul 51
(Contd 1)

removes 97% of the dust, is small, noiseless, requires 13 kw instead of the usual 60-100 kw, has low air flow resistance, and is equipped with both movable and stationary pptn plates. The movable plates pass through an oil bath and clean the stationary plates by means of brushes. The movable plates are also cleaned by brushes in the course of operation. Rion-28 was successfully tried in Moscow subway stations. It has been installed at heavy machine building, metallurgical, and chemical plants and will be also used at hospitals, theaters, movies, railroad stations, etc. NIOGAZ

USSR/Chemistry - Purification of Air Jul 51
(Contd 2)

together with the Sci Res Inst of the Automobile and Autotractor Ind has developed a method of eliminating CO, smoke, and evil-smelling substances from exhaust gases of int combustion engines. The research results are favorable, and work on the problem will be completed in the near future.

ROZENBERG, D. YE.

FA 65T72

USSR/Medicine - Hygiene and Sanitation, Apr 1948
Industrial
Medicine - Dust

"A New-Model Electrostatic Dust Remover," D. Ye.
Rozenberg, 2 pp

"Gig 1 San" No 4

Presents data on the performance of new-model electrostatic dust precipitator that is able to precipitate up to 97% of the dust contained in air. This was developed at NicGaz laboratories of the All-Union Trust "GazoOchistka."

FDB

65T72

ROZENBERG, D. YE.

PA-75T78

USSR/Medicine - Hygiene and Sanitation Mar/Apr 1948
Medicine - Water, Supply

"Republican Scientific Conference of Young Hygienists";
D. Ye. Rozenberg, 2 pp

"Sovetskoye Zdravookhraneniye" No 2

Conference, first of its kind, was held in Moscow
9-10 Dec 1947 and 25 papers were read on water supply,
food, atmosphere, soils, etc., some of which are
summarized.

FDB

75T78

ROZENBERG, D. Ye.

Jubilee scientific session of the Scientific Research Institute
of Vitaminology of the Ministry of Public Health in the U.S.S.R.
Sov. Med. 26 no.9:151-152 S '62. (MIRA 17:4)

ROZENBERG, D. Ye.

PA 50/49T78

USSR/Medicine - Radiology
Medicine - Medical Societies

May 49

"Scientific Conference on Problems of Radiant
Energy," D. Ye. Rozenberg, 1 p

"Gig 1 San" No 5

Summarize work on subject conference held 28 Nov 48
at Cen Sci Res Sanitation Inst imeni F. F. Erisman.
Lists five papers submitted, among them, "Data on
Effects of Ultraviolet Radiation on the Body,"
and "Tests on the Effectiveness of Bactericidal
Lamps in Water Purification."

FDD

56/49T78

ROSENBERG, D. To.

Cand. Medical Sci.

"A New-Model Electrostatic Dust Remover," Gig. i San., No. 4, 1948;

"All-Russian Scientific Conference on the Planting of Trees and Bushes in Cities," ibid., No. 6, 1948;

"Public Health Problems in the 'Reconstruction of Moscow' Exhibition," Sov. Zdrav., No. 1, 1948;

"Republican Scientific Conference of Young Hygienists," ibid., No. 2, 1948;

"The Meeting of the Sanitation-Hygienic Scientific Institute of the RSFSR," ibid., No. 5, 1948;

"Scientific Conference on Problems of Radiant Energy,"

Gig. i San., No. 5, 1949;

"All-Russian Conference of the Active Workers of Rural and Kolchoz Building," ibid., No. 6, 1949;

"Scientific Conference on Industrial Gas Purification," ibid., No. 2, 1950.

ROZENBERG, E. K.

Sbornik uprazhneniy po bukhgalterskomu uchetu [Handbook of exercises on
accounting by S. S. Vedernikov i E. K. Rozenberg] 2 perer. izd. Moskva,
Gosstatizdat, 1951.
290 p. tables.

N/5
611:91
.V4
1951

Graphite inclusions and the grain size of cast iron. E. M. Rosenberg. *Litvase Dato* 9, No. 1, 10-22(1038); *Chem. Zentr.* 1938, II, 2485.—The relative grain size of graphite inclusions as referred to the grain size of the cast iron is more important in detg. the properties of the cast iron than the abs. grain size of such inclusions. Therefore, coarse-grained cast iron is less sensitive to this influence than the fine-grained metal, since the probability of a dangerous discontinuity of structure as the result of the graphite inclusions is less in the former case. In addn. to the grain size, the phys.-chem. properties of the graphite inclusions play an important role. The various methods of detection and detn. of graphite are reviewed, as are also methods of influencing the graphitization of the cast iron, as, e. g., changing the velocity of cooling or the concn. of C or alloying constituents. M. G. Moore.

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																										MATERIALS INDEX																									
ca																										9																									
Grain size in pig iron. E. M. Rosenberg. <i>L'Industrie</i> 9, No. 6, 8-11 (1938); <i>Chem. Zentr.</i> 1939, II, 207; cf. C. A. 33, 1929; 34, 5383. —A special method was used for detn. of the grain size. Specimens 210 x 30 x 10 mm. were heated to 880°, kept at this temp. for 1 hr., and then one end of the specimen (about a fourth of the total length) was plunged into oil until cooling was complete. In the slowly cooled portion of the specimen a sorbite or sorbite-like structure formed, depending upon the chem. compn. of the iron. The quenched end with a Brinell hardness of 600 units showed chiefly a martensite structure. Etching was done with a 4% a/c. soln. of HNO₃. Magnification for microscopic investigation should not be more than 20-30 diams. The structure shown by various specimens of pig iron treated by this method is discussed. The literature is reviewed and the importance of a knowledge of the grain size of cast iron pointed out. M. G. M.																																																			
ASB. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION																																																			
1ST ORDER																										2ND ORDER																									
3RD ORDER																										4TH ORDER																									

CA

7

NEW METHOD OF TESTING THE HARDNESS OF METALS BY SCRATCHING. R. M. ROSENBERG, *Zavodskaya Lab.* 7, (1901) 5(1818). A modified Berbaum microscope app. (cf. C. A. 15, 631) (a diagram is appended) is used for the detn. of the hardness of metals by scratching the surface of a finished article or prep. plate by means of a diamond point at a definite spring tension and counterwts. The length of the scratch is a more definite measure of hardness than its width. Comparative values of hardness obtained by the Brinell, Moos and the proposed method for various Fe products, minerals and ores are tabulated and discussed. Chas. Blanc

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
BC B-I-1 New instrument and method for testing [hard- ness] by the scratch test. E. M. ROSENBERG (Zavod. Lab., 1938, 7, 1290-1295).—Apparatus is described. R. T.																			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
1ST GROUP										2ND GROUP									
1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									

ACC NR: AP6025637

(A)

SOURCE CODE: UR/0413/66/000/013/0088/0089

INVENTOR: Rozenberg, E. I.; Efros, I. Ye.

ORG: None

TITLE: A device for parallel translation of the transit line in a telescopic sight, e. g. in an autocollimator. Class 42, No. 183428

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 88-89

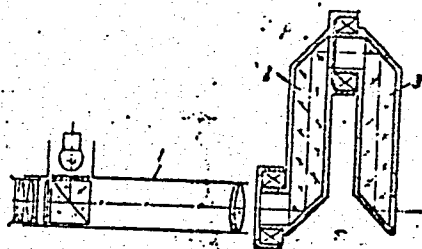
TOPIC TAGS: optic equipment component, collimation, telescopic equipment, optic prism

ABSTRACT: This Author's Certificate introduces a device for parallel translation of the transit line in a telescopic sight, e. g. in an autocollimator. The main rhombic prism in the instrument (or an equivalent system of mirrors) is mounted so that it may rotate about the sighting axis of the telescope. The unit is designed for expansion of the limits of transit line displacement to any preset value within these limits. An additional rhombic prism is mounted so that it may be turned with respect to the main prism about an axis parallel to the sighting axis of the telescope.

Card 1/2

UDC: 535.885.5

ACC NR: AP6025637



1--telescope; 2--main prism;
3--additional prism

SUB CODE: 20, 14/ SUBM DATE: 05Apr65

Card 2/2

ACC NR: AR6022049

SOURCE CODE: UR/0272/66/000/002/0029/0029

AUTHOR: Rozenberg, E. I.; Efros, I. Ye.; Vurganova, Ye. A.

TITLE: Investigation of double-image sight tubes for measuring deviations from rectilinearity and axial alignment in components of moderate dimensions

SOURCE: Ref zh. Metrol i izmerit tekhn., Abs. 2.32.204

REF SOURCE: Tr. N.-i. proyektno-konstrukt. in-ta tekhnol. mashinostr., no. 1, 1965, 69-74

TOPIC TAGS: quality control, optic equipment component, optic measurement

ABSTRACT: The NIITmash of the ASMKh has developed several simplified double-image sight tubes for measuring deviations from rectilinearity and axial alignment in components of moderate dimensions. Pilot models of sight tubes were assembled on a first class surface plate (1500x1000 mm) for research and development of methods for measuring and determination of metrological parameters. These tubes were used for measuring the deviations from rectilinearity in a section of the surface of this plate. Tables and graphs are given showing the results of measurements which indicate that double-image sight tubes may be used for precision measurement by the telescopic method. 3 illustrations, 5 tables, bibliography of 3 titles. N. Zevina. [Translation of abstract]

SUB CODE: 13

Card 1/1

UDC: 535.317.2

ROZENBERG, E.I., EPR'S. 1.1.

Visor for measuring the coaxial nonalignment of holes. 12m.
tekh. no. 4:52-53. Apr '65. (MIRA 18:7)

ROZENBERG, E.; EFROS, I.Ye.

Rapid mirror adjustment in measuring with autocollimators.

Izm. tekhn. no.9:20-21 S '64.

(MIRA 18:3)

ROZENBERG, E.I.; EFROS, I.Ye.

Telescopes for measuring the nonrectilinearity and noncoaxiality
of medium-size articles by the sighting method. Izv.tekh. no.11:
10-11 N '63. (MIRA 16:12)

L 51434-65

ACCESSION NR: AP5015520

UR/0286/65/000/008/0057/0057
535.885.5

10
B

AUTHOR: Rozenberg, E. I.; Efros, I. Ye.

TITLE: A device for studying telescopic sights. Class 42, No. 170181

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1965, 57

TOPIC TAGS: telescopic equipment; collimator

ABSTRACT: This Author's Certificate introduces a device for studying telescopic sights. The unit contains an autocollimator, a mark, an objective lens and a plane mirror which is mounted perpendicular to the optical axis of the autocollimator and can be moved along this axis. A Galilean telescope system is used as the objective lens to maintain constant magnification of the mark image.

ASSOCIATION: none

SUBMITTED: 31Mar64

ENCL: 01

SUB CODE: OF

NO REF SOV: 000

OTHER: 000

Card 1/2

ROZENBERG, E.I.

Optical and mechanical devices for checking the rectilinearity
and coaxiality of large items. Izv. tekhn. no.7:57-58 J1 '63.
(MIRA 16:8)

(Optical instruments)

S/115/61/000/004/001/010
B129/B206

AUTHORS: Delyunov, N. F. and Rozenberg, E. I.

TITLE: Linear and angular measuring instruments from GOMZ

PERIODICAL: Izmeritel'naya tekhnika, no. 4, 1961, 5-9

TEXT: The Gosudarstvennyy optiko-mekhanicheskiy zavod im. OGPU (State Optical and Mechanical Plant imeni OGPU) is one of the leading Soviet plants for the precision instruments mentioned in the title. They mass-produce more than 30 types of such instruments with additional equipment, and a great number of experimental and special instruments. GOMZ produce the universal measuring microscope of the type УММ-21 (UIM-21), the design of which is obsolete with regard to performance and easy operation. A new universal measuring microscope of the type УММ-23 (UIM-23) was developed, series production of which is scheduled for 1961. An optical system projects the part to be tested on a screen which has a reading system. All additional equipment of UIM-21 can be used for the UIM-23. For big and heavy parts, the universal measuring microscope of the type УММ-24 (UIM-24) was built, which is intended for measuring in rectangular and

Card 1/5

Linear and angular measuring...

S/115/61/000/004/001/010
B129/B206

polar coordinates. The universal measuring microscopes of the types УИМ-22 (UIM-22) and УИМ-25 (UIM-25), which also have a screen and a greater measuring range, were produced during 1958-1959. The plant also produce in series the vertical optimeter of the type ИКВ (IKV) and the horizontal optimeter of the type ИКТ (IKG) with special additional equipment. The production of the electric contact head of the type ПК-2 (GK-2) was started in 1960; it is an additional equipment to the IKG and the measuring machines of the type ИЗМ (IZM), and is intended for inside measurements from 1 to 13.5 mm. A new model of a universal measuring comparator (of a horizontal longitudinal measuring device) of the type ИКУ-2 (IKU-2) for outside and inside linear measurements was elaborated in 1959. The plant pay great attention to the development of cathetometers for measuring vertical sections of parts inaccessible to direct measurement. The data of these cathetometers are listed in Table 3. The plant also produce in series measuring machines of the type ИЗМ-10М (IZM-10M) and ИЗМ-11 (IZM-11) for outside and inside linear measurement of various products. In these new designs the followers permit transverse displacement of the part to be measured and are suitable for testing great end masses. Table 4 gives the data of mass-produced spherometers for measuring curvature radii. The data

Card 2/5

Linear and angular measuring...

S/115/61/000/004/001/010
B129/B206

for this paper originate from lectures delivered at the soveshchaniye po opticheskim metodam izmereniya dlin i uglov v Leningrad (Conference on Optical Longitudinal- and Angular Measuring Methods in Leningrad) and the soveshchaniye po izmeritel'noy tekhniki v Estonskom respublikanskom sovet nauchno-tekhnicheskikh obshchestv (Tallin) (Conference on Measuring Technology at the Estonian Council of Technical Associations of the Republic). There are 8 figures, 4 tables, and 4 Soviet-bloc references.

Card 3/5

Linear and angular measuring...

Legend to Table 3: 1) Type of the cathetometer: a) KM-6 (KM-6); b) KM-8 (KM-8); c) KM-9 (KM-9); 2) vertical measuring range, mm; 3) distance of the part to be measured from the objective, mm; 4) division on the tubus, seconds of arc; 5) error limit of an estimate with the reading system; 6) measurement error of the instrument for measuring a scale graduated in mm. The values from top to bottom refer to measuring lengths of 140-150, 340-380, 500-625, 730-969, and 2000 mm and more; 7) calculated values.

S/115/61/000/004/001/010
B129/B206

Технические характеристики	Катетометры		
	а KM-6	б KM-8	в KM-9
1. Пределы измерения по вертикали, мм	0-200	0-500	0-1000
2. Расстояние измеряемого изделия от объектива зрительной трубы, мм	140-150 340-380 500-625 730-969	470-670 610-1000 890-2000 2000-∞	
3. Цена деления цилиндрического уровня зрительной трубы (на 2 мм), сек.	20	4	
4. Предельная погрешность отсчета по масштабной сетке отсчетной системы, мм	±0,0015	0,0015	
5. Погрешность прибора при измерении стеклянной штриховой шкалы, мм:			
при расстоянии до измеряемой шкалы 140-150 мм	±0,006	-	
при расстоянии до измеряемой шкалы 340-380 мм	±0,010	-	
при расстоянии до измеряемой шкалы 500-625 мм	±0,014	-	
при расстоянии до измеряемой шкалы 730-969 мм	±0,021	-	
при расстоянии до измеряемой шкалы 2000 мм и выше	-	±(0,03-0,04) (расчетное значение)	

TABLE 3

Card 4/5

Linear and angular measuring...

Legend to Table 4: 1) Spherometers of the types: a) ИЗС-7 (IZS-7); b) ИЗС-8 (IZS-8); c) ИЗС-9 (IZS-9); 2) radii measuring limits for various test glasses, mm; 3) radii measuring limits of individual spherical faces, mm; 4) smallest division of the reading scale; 5) division of the linear scales; 6) measurement error of the measurement of radii with a pair of test glasses; 7) measurement error (%) of the measuring of radii of individual faces for the measuring ranges of 10-37.5, 37.5-1000, and 80 - ∞ mm.

S/115/61/000/004/001/010
B129/B206

Технические характеристики	Сферометры		
	а ИЗС-7	б ИЗС-8	с ИЗС-9
2 Пределы измерения радиусов пар основных пробных стекол ОПС, мм	37,5-750	—	—
3 Пределы измерения радиусов отдельных сферических поверхностей, мм	10-1000	80-∞	—
4 Цена наименьшего деления отсчетного устройства, мм	—	0,001	—
5 Цена деления линейной шкалы, мм	1,0	1	—
6 Погрешность результата измерения радиусов пар пробных стекол, %	±0,02	—	—
7 Погрешность результата измерения радиусов отдельных сферических поверхностей, %:			
от 10 до 37,5 мм	±0,07	—	—
37,5 - 1000 "	±0,04	—	—
80 мм до ∞ "	—	±(0,02-0,06)	—

TABLE 4

Card 5/5

DELYUNOV, N.F.; ROZENBERG, E.I.

Instruments for linear and angular measurements manufactured by the
State Optical Mechanical Plant. Izv.tekh. no.4:5-9 Ap '61.

(MIRA 14:3)

(Measuring instruments)

137-58-6-13346

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 314 (USSR)

AUTHORS: Kaminskiy, V. M., Rozenberg, E. Z

TITLE: An Investigation of Heat-resistance Properties of Solid Solutions (Izucheniye zharoprochnosti tverdykh rastvorov)

PERIODICAL: V sb.: Issled. po zharoprochn. splavam. Vol 2, Moscow, AN SSSR, 1957, pp 34-43

ABSTRACT: A presentation of the results of an investigation dealing with the effect of the magnitude of interatomic forces in crystal lattices of Ni-base solid solutions (SS) on their stress-rupture time properties, as well as of the effect of the internal structure of austenite grains on the strength of the metal at elevated temperatures. The characteristic temperature or the mean-square deviation of the atoms from their equilibrium position during thermal oscillations served as standards of the strength of the interatomic bonds (IB). Indirect studies of the strength of the IB were performed on the basis of a relationship in which the magnitude of G and internal friction appear as functions of the temperature employed in the tests and the composition of the alloy. The stress-rupture time properties of

Card 1/2

137-58-6-13346

An Investigation of Heat-resistance Properties of Solid Solutions

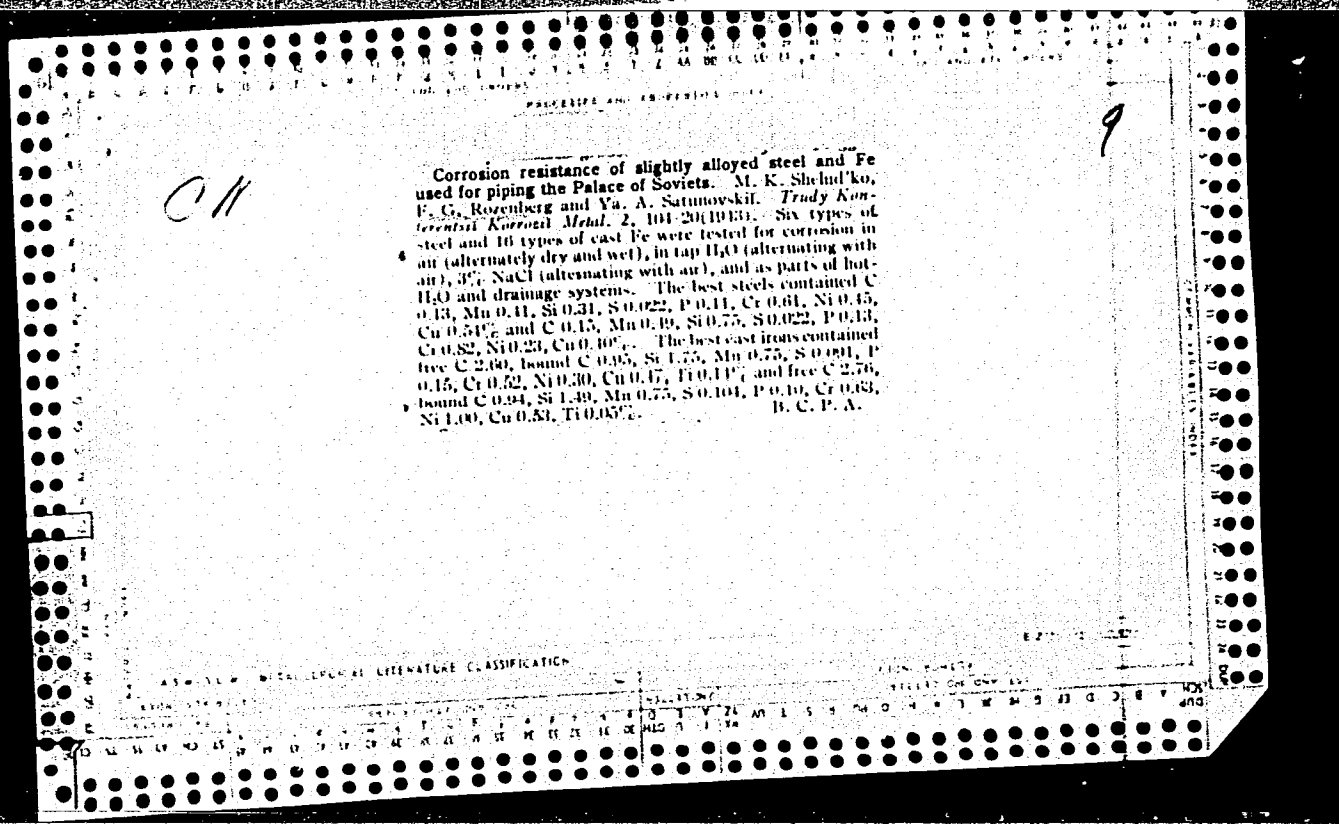
the alloys at temperatures of 600, 700, and 800°C provided the standards for the heat-resistance properties. In order to study the effect of the internal grain structure of SS's on their behavior at elevated temperatures, X-ray diffraction and magnetic analysis methods were employed to investigate structural changes occurring during phase hardening in an alloy containing 29% Ni and 1% Ti. Attention is drawn to the direct relationship existing between the strength of the IB in the crystal lattice of SS's and the heat-resistance properties of the latter. Alloying of Ni with Ti and Cr increases the strength of the IB. At elevated temperatures and relatively small stresses, which would effect destruction of the alloy only after a very long period of time, the alloyed SS's may lose their advantage over SS's which have been alloyed to a smaller degree; this condition is due to a decrease in the difference of mobility of atoms in crystal lattices of the SS's investigated, as well as to the progress of "diffusional" deformation. It is pointed out that disruptions in the lattice of a SS, caused by a large number of intragranular division interfaces which appear after the phase hardening, result in an increased resistance to high-speed deformation and a reduced resistance to low-speed deformations. Bibliography: 11 references. 1. Nickel alloys--Mechanical properties 2. Nickel alloys--Test results 3. Nickel alloys--Crystal structure V. N.

Card 2/2

ROZENBERG, F.

Let's improve the training of miners in the Donets Basin. Prof.-tekh.
obr. 20 no.1:29 Ja '63. (MIA 16:2)
(Donets Basin--Coal miners--Education and training)

[illegible]



ROZENBERG, F. V.

Interferometer

Multiple-ray interferometry and interference light filters. Part II. Usp. fiz.
nauk 47 no. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified

ROZENBERG, F. Ya.

All-Union intermin school for studying the use of equipment
complexes with powered supports. Ugol' 39 no.11:75-76 N '64.
(MIRA 18:2)

1. Tsentral'nyy nauchno-issledovatel'skiy institut informatsii
i tekhniko-ekonomicheskikh issledovaniy ugol'noy promyshlennosti.

ROZENBERG, F.Ya.

School for studying the practice of using electrorotary drilling
with flushing in development mining. Shakht. stroi. 7 no.6:30-31
Je '63. (MIRA 16:7)

(Boring)

ROZENBERG, F.Ya.

All-Union seminar on the study of the state of degasing work
in coal mines. Ugol' '38 no.9:62 S '63. (MIRA 16:11)

1. Starshiy inzh. Tsentral'nogo nauchno-issledovatel'skogo
instituta informatsii i tekhniko-ekonomicheskikh issledovaniy
ugol'noy promyshlennosti.

ROZENBERG, F.Ya.

All-Union school for teaching the mining of coal with plows. Ugol' 40
no.2:63-64 F '65, (MIRA 18:4)

ROZENBERG, F.Ya.

Seminar on the improvement of economic operations, organization
of economic services and increasing the profitability of
operations in mines of the coal industry, Ugol' 40 no.3:76-78
Mr '65, (MIRA 18:4)